

A brief description of each test case is provided, followed by figures comparing the measured lateral load-deflection curves to those predicted by MultiPier using the P-y approaches described earlier in this chapter. Because each case is installed in weathered rock only, the same P-y model is used for the entire weathered rock mass. The data also provide a comparison of the back figured load-displacement curves to those developed using the stiff clay, Reese (1997) rock criteria, and geological model by Cho (2002).

Table 47. Basic information about lateral load test

Tests	Embedded Length (ft)
Nash County-Long	16.0
Nash County -Short	12.0
Caldwell County -Long	16.7
Caldwell County -Short	14.1
Wilson County -Long	19.7
Wilson County -Short	16.9
I-40 (Durham County)-Long	14.8
I-40 (Durham County)-Short	11.8
I85 (Durham County)-Long	14.7
I85(Durham County)-Short	9.7

Nash Halifax County Case

The base rock of this site consisted of a metamorphic mudstone, siltstone, and sandstone of the Eastern Slate Belt along the easterly edge of the Piedmont Physiographic Province. In spite of the presence of metamorphosed rock, the foliation of rock is poorly developed, and the rock is mostly sound, but some natural fractures are present. The recovery rate of the hard rock core was over 95% and the RQD for the lower 15 feet (4.57 m) exceeded 75%.

Two drilled shafts were constructed, 25 feet (7.62 m) apart. The short shaft was embedded approximately 11 feet (3.35 m), and the long shaft was embedded 15 feet (4.57 m). Both shafts were constructed with approximately 2 feet (0.61 m) of its length